

## ABSTRACT

A method of generating a digital signature within a computer chip includes receiving data representing a message, and generating a digital signature for the message by modifying the message data with additional data, calculating a hash value of the modified message, and encrypting the hash value using a private key of a public-private key pair. The additional data includes data prestored within content searchable memory of the computer chip and a verification status of the computer chip. The verification status is identified out of a plurality of predefined verification statuses as a function of verification data input into the computer chip and data prestored within the computer chip. An identified verification status is used by one entity in determining risk regarding an electronic communication from another entity, especially where the electronic communication comprises a request and a digital signature generated by the computer chip.